

Simplifying radicals

This symbol $\sqrt{\quad}$ is called a radical sign.

$\sqrt{24}$ "square root of 24"

$\sqrt[3]{81}$ "cube root of 81"

$\sqrt[5]{500}$ "5th root of 500"

Simplify the following radicals

① $\sqrt{24}$

$$\sqrt{6 \cdot 4}$$

$$\boxed{2\sqrt{6}}$$

② $\sqrt[5]{500}$

$$\sqrt[5]{2 \cdot 2 \cdot 5 \cdot 5 \cdot 5}$$

$$\sqrt[5]{500}$$

500

50 · 10

25 · (2) (5) (2)

(5) · (5)

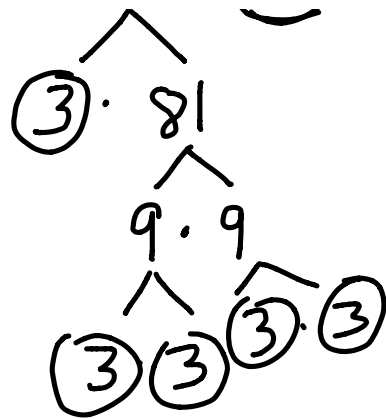
③ $\sqrt[5]{486}$

⑤ $\sqrt[5]{2 \cdot (3 \cdot 3 \cdot 3 \cdot 3 \cdot 3)}$

486

243 · (2)

$$3 \cdot \sqrt[5]{2}$$



$$4 \sqrt[4]{9375}$$

$$5 \sqrt[4]{15}$$